# 6. Spiders from the Montebello Islands. By H. R. Hogg, M.A., F.Z.s. 

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The collection of Spiders hereunder described was made partly by Mr. P. D. Montague, and partly by Mr. T. H. Haynes. By the kindness of these gentlemen they have been placed in my hands.

The Montebello group is situated on the N.W. coast of Australia, off the Port of Onslow, W. Australia, the largest, Hermite Island, being 90 miles from the mainland, in lat. $20^{\circ} 30^{\prime} \mathrm{S}$., long. $145^{\circ} 15^{\prime} \mathrm{W}$.

Mr. Montague visited the islands for the purpose of collecting specimens of the fauna, and Mr. Haynes lived on Hermite Island for about three years, until driven off by a hurricane which destroyed his hut and a larger collection which he had been good enough to make at my request.

Mr. Haynes informs me that the soil consists of sandstonerock, similar to that on the mainland, of which therefore the islands were probably part, and the S.E. winds prevailing for the six winter months blow off the land.

It will be noticed that by far the larger number, both of species and specimens, are of the family Argiopidæ, with a small sprinkling of Lycosidæ, Thomisidæ, Clubionidæ, Oxyopidæ, and Attidx.

Notable absentees are Delence cancerides Walck., and Latrodectus hasseltii Thor., found generally in every part of Australia, but no specimens have been brought from here.

Family ARGIOPID.

Subfamily Tetragnathine.<br>Group Tetragnathee.

Genus Tetragnatha Latreille.
Tetragnatha angulata, sp. n. (Pl. I. fig. 1.)
A single specimen (P. D. M.).
Female. The cephalothorax is greyish yellow, with broad darker depressions separating the cephalic from the thoracic part and broad dark grey radial lines from the margin of the cephalothorax to a transverse broad oval depression, one-third of the distance between the end of the cephalic part and the rear end of the thoracic, also dark grey round the margin of the thoracic part; it is sparsely covered with short, fine, white hairs. The eyes are yellow on black ground. Mandibles yellow tinged with dark grey at the sides, and with a few white hairs. Fangs yellowbrown. Sternum rather dark yellow-brown. The lower part of the lip the same. The upper margin of the lip and the maxilla are bright yellow with light brown fringes. Legs and palpi pale yellow with brown spines, rising from brown patches. The abdomen above is greyish yellow, with a mottling of darker grey, pale yellow below with a broken median darker yellow stripe.

The cephalothorax is twice as long as broad, convex, narrowred in front, rounded at the sides, and slightly hollowed at the rear end.

The rear row of eyes is straight, or slightly recurved when seen from above, of equal size, the median $2 \frac{1}{2}$ diameters apart and 3 diameters from their laterals, which are their diameter away from the front laterals. The front row, more strongly recurved, has the laterals only half the diameter of the rear, lying on the same tubercle therewith. The front median are rather larger than the rear, $1 \frac{1}{2}$ times their diameter apart, and the same from the rear, so that they form a quadrilateral, broadest posterionly; theysare one-half their diameter from the margin of the clypeus, which overhangs the insertion of the mandibles. These are divergent, projecting forward, kneed at the base. On the outer margin of the falx-sheath are five teeth at equal intervals apart, the upper one situated at the anterior inner corner is the largest, the others diminishing in order of sequence. On the under side the upper one is similarly placed, followed by two rather smaller, at intervals of their length, and then three quite small close together.

The maxillæ are rather dirergent, truncate, and broadest
anteriorly, three times the height of the lip, which is broader than long, rounded in front, straight at the sides with the upper margin clearly protrudent. The steruum is shield-shaped, $1 \frac{1}{2}$ times as long as broad; from its greatest breadth between the second pair of coxre it narrows slightly anteriorly and posteriorly to a point between the not quite contiguous rear coxa. The legs are long and thin, the metatarsi and tarsi tapering to a very fine point. The abdomen is twice as long as broad, widening from the base to halfway of its length, whence it rather suddenly narrows and tapers to the spinnerets. The epigyne is domeshaperl on the upper half, overhanging two oval hollows, one each side of a median broad ridge.

This species is rather near L. Koch's T'. gemmata from Port Mackay, but is smaller ; the first pair of legs not so long compared with the second, and the mandible on the upper side is without the large tooth near the middle of the anterior edge; the coloration is much lighter, and there are brown spots on the legs.

The measurements (in millimetres) are as follows:-

|  | Lomg. | Betad. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cephalothorax... | 2 | 1 |  |  |  |  |
| Abdomen......... | 4 | 2 | . |  |  |  |
| Mandibles | $1 \frac{1}{4}$ |  |  |  |  |  |
|  | Coxie. | Tr. \& fem. | $\begin{aligned} & \text { Pat. \& } \\ & \text { tib. } \end{aligned}$ | Metat. $\&$ tars. |  |  |
| Legs ........ 1. | $\frac{3}{8}$ | 4 | 5 | 4 | $=$ | 133 |
| 2. | $\frac{1}{4}$ | 3 | 3 | 3 | $=$ | $9 \frac{1}{4}$ |
| 3 | $\frac{1}{4}$ | 11. | 1 | 112 | $=$ | $4 \frac{1}{4}$ |
| 4. | $\frac{3}{3}$ | 3 | $2 \frac{1}{2}$ | 3 | $=$ | $8 \frac{3}{8}$ |
| Patpi ............ | $\frac{1}{1}$ | $\stackrel{1}{2}$ | $\frac{3}{8}$ | $\frac{3}{3}$ | $=$ | $1 \frac{1}{2}$ |

Sulfamily Nephmine.

## Group Nephilee.

Genus Nephila Leach.
Nephila vejosa L. Foch.
8 females (2 non-adult). P. D. Montague.
Mab. (sec. Rainbow). Polynesia, New Guinea, Torres Straits, Queensland, N. S. Wales. Victoria and S. Australia (II. R. II.).

In these specimens the eyes of the rear row are clearly smallerthan those of the front row, whereas in L. Koch's description they are of the same size. This is also the case in my specimens fiom S. Australia. The longitudinal lines on the rear end of the abdomen are also absent, but the specimens agree in otherrespects; and I see no reason for making them a local variety, which they might be said to be if only found on this particular island.

Nephila meridionalis Hogg, var. hermitis nov. (Pl. I. fig. 2.)
Trans. Royal Soc. of S. Australia, vol. xxxiv. 1910, p. 59 \%.
4 females, T. H. 10 females ( 6 non-adult), P. D. M.
These correspond in almost every particular with my $N$. meridionalis from Kangaroo Island, S. Australia.

They differ, however, in having the distance between the rear row of median eyes rather greater than that between the front median instead of the same; in the clypens $1 \frac{1}{2}$ times as wide as the distance between the front median eyes instead of equal to it; and the pale lines forming the pattern on the under side of the abdomen much finer. There are also two small black spots behind the eyes and two more on the margin of the cephalic part. I have therefore made it a new variety: hermitis.

The measurements (in millimetres) are as follows :-


Another specimen measures:-
Long. Broad.

| Cephalothorax... | 10 |
| :--- | :---: |
| Abdomen........ | 13 |
| Mandibles ...... | $4 \frac{1}{2}$ |


|  |  | Сохх. | Tr. \& fem. | Pat. \& | $\begin{aligned} & \text { Metat. } \\ & \text { \& tars. } \end{aligned}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Legs. | 1. | $2 \frac{1}{2}$ | 16 | 15 | 21 | $=$ | 54, |
|  | 2. | $2 \frac{1}{2}$ | 15 | 13 | 19 | = | $49 \frac{1}{2}$ |
|  | 3. | 2 | . | 7 | 10 | = | 28 |
|  | 4. | $2 \frac{1}{2}$ | 14 | 10 | 15 | $=$ |  |
| Palpi | ... | 1 | 4 | 4 |  | $=$ | $13^{2}$ |

Differing very slightly from the original type-specimen.
Another, with a cephalothorax $9 \times 7 \mathrm{~mm}$., has the abdomen $20 \times 14 \mathrm{~mm}$., apparently full of eggs.

[^0]
## Subfamily Argiopins.

Group Argiopere.
Genus Argrope Aud.

## Argrope trifasciata Forskẳl.

13 females, P. D. M. 3, T. H.
Widely spread over Northern Australia, the Pacific Islands, and many other tropical and subtropical parts of the world.

Argiope haynesi, sp. in. (Pl. I. tig. 3.)
This species, of which Mr. Haynes sent 10 females, is closely related to L. Koch's A. protensa and A. syrmatica, thongh it differs from them both more than they do from one another; and I have therefore named it as new.

The cephalothorax is yellowish grey, thickly covered with smooth silvery grey hairs all over the thoracic part, and in a median longitudinal area between the eyes and at the sides of the thoracic part the darker under coloration shows through, but there are no definite dark longitudinal lines as in protensa and syrmatica.

The mandibles are dark grey at the base and on the outer sides, rather bright yellow on the inner and anterior portions. The fangs red-brown at base and pale red forward. The lip and maxillæ are bright yellow on the upper half, brown below. The sternum is black-brown, with fine downlying grey hairs at the sides, and a thickly haired yellowish-white median area reaching: the whole length.

The abdomen is silvery white with fine white laairs on the upper side; a narrow black longitudinal line, rumning from the base to rather more than halfway, with two transverse lines at the upper eurl, like a Russian cross. There are no longitudinal lines at the posterior end. The base of the unter side is yellow at the sides and dark grey* in the middle. The dark area is continued in a broad median stripe to the spinnerets, bordered on each sidle by a white network-patterned area, which passes behind the spinnerets, the dark stripe being continued to the posterior end, as in A. protensa, but not in A. syrmatica. The sides are dark grey with pale yellow longitudinal lines.

The legs are darkish yellow, with long brown spines and grey hairs. The anterior half of the metatarsus and the whole of the tarsus of all legs have short brown bristly hairs. The front of the patella and base of the tibia is dark brown. Near the anterior end of the tibia is a brown ring, and the anterior end of same and base of metatarsus are likewise covered by a brown spot. The under side of femur 1 is dark grey.

The cephalothorax, one-third longer than broad. is rounded at the sides, the cephalic part, narrow and short, heing divided by well-marked depressions from the thoracic. It does not reach to the median fovea, which is short and recurved. The whole
area is rather flat and covered with particularly smooth long hairs all lying longitudinally.

The front row of eyes is straight, the median pair their diameter apart and $1 \frac{1}{2}$ times the same distance from the laterals, which are only half their diameter. These are also their diameter from the rear laterals, the diameter of the latter being half as large again, and farther away, sideways, by the brearlth of the front laterals. The rear median are the same size as the front merlian, two diameters thelefrom and $1 \frac{1}{2}$ diameters from one another. Therefore they form with their laterals a strongly procurved row.

The mandibles are short and conical, only slightly kneed at the base and divergent at the anterior end. The fangs are slightly eurved and rather long. On the upper part of the outermargin of the falx-sheath is one long tooth between two shorter, and on the inner in the same position three also, the lowest being the largest.

The maxillæ are convex, as long as broad, obtusely arehed on the upper edge and rounded at the back. The lip is broader than long, curved to an obtuse angle in front, where it is very convex, with a short narrower lower stem.

The sternum is shield-shaped, scolloped at the sides, half as long again as broad; opposite the second and third coxr the median area is projected into high round protuberances, and at the posterior end is a similar but still larger oval knob. The hair is downlying, finer at the sides than in the middle streak, and there are a few long bristles at the anterior end.

The abdomen is $2 \frac{1}{2}$ times as long as its breadth in the middle, whence it tapers to a narrow rounded point at each end. On the under side the base is less constricted and more rounded off, the sides are straighter until beyond the spinnerets, where it is suddenly narrowed into a stunted tail. On the back are four pairs of muscle-spots.

The epigyne is formed in the same unique fashion as in A. protensa and A. syrmatica, a chitinous cushion-like pearshaped projection, broadest at the base and having a blunt ova? fore end, standing straight up. The basal end is about one-third of the whole breadth of the abdomen at that part.

The legs are rather long and very fine in the anterior joints, the tibia broadened out and flattened at the anterior end, and the trochanter of the fourth pair nearly as long as the coxre.

The femoral joint of the palpi is strongly incurved, and broadest at the anterior end. The tibia is twice as long as the patella, and. the metatarsal joint is covered with long bristly hairs.

The measurements (in millimetres) are as follows :-
Long. Broad.

|  | Long. | Broad. |
| :--- | :---: | :--- |
| Cephalothorax... | 4 | $\left\{\begin{array}{l}1 \frac{1}{4} \text { in front. } \\ 3\end{array}\right.$ |
| Abdomen....... | 10 | 4 |
| Mandibles $\ldots \ldots$. | $1 \frac{1}{4}$ |  |


| Legs |  | Coxæ. | Tr. \& fem. | Pat. \& tib. | Metat. \& tars. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1. | 1 | 7 | $6 \frac{1}{2}$ | $8 \frac{1}{2}$ | $=$ | 23 |
|  | 2. | 1 | 7 | 6 | 8 | $=$ | 22 |
|  | 3. | $\frac{3}{4}$ | $4 \frac{1}{2}$ | 3 | $4 \frac{1}{2}$ | $=$ | $12 \frac{3}{1}$ |
|  | 4. | $\frac{3}{4}$ | 7 | 5 | 7 | $=$ | 193 |
| Palpi |  | $\frac{1}{2}$ | 2 | $1 \frac{1}{4}$ | $1 \frac{1}{2}$ | $=$ | $5 \frac{1}{4}$ |

The obvious difference between this species and $A$. protensa and A. syrmatica, which latter are very much alike, is the shortened tail, the absence of the dark longitudinal markings on the cephalothorax and of the longitudinal markings on the posterior end of the upper side of the abdomen, almost every other point being the same or very slightly modified in the three species.

In the somewhat allied genus, Arachnura Vins., several species have been constituted on the differences of the knobs at the end of their tails and of their shoulder-humps. Oftentimes these differences are seen in spiders of the same group of webs, and the spiders are possibly all derived from the same batch of eggs. I am not satisfied that this does not occur in the above species, the two first named being both described from the same locality, Port Mackay, in Queensland. The differences between then, if any, are very trifling.

## Group Mangoree.

## Genus Larinia Simon.

## Larinia montagui, sp. n. (Pl. I. fig. 4.)

$\simeq$ females, P.D. M. 1 female, T. H.
Cephalothorax pale yellow, with a slightly darker median longitudinal streak and thinly spread white hairs. Mandibles the same, with pale yellow-brown fangs. Maxillæ and upper half of lip pale yellow, but base of latter light brown. Sternum pale yellow in median area, with light yellow-brown along the sides and at the lower end. Legs and palpi similar pale yellow, with fine white hairs, light brown spines on brown roots, and brown bristles on tarsus and metatarsus. On femur 1 the brown spots are much more numerous than elsewhere.

The abdomen above is pale yellow with white hairs and white upstanding bristles, but mottled with darker brown in patches, giving the whole a uniform dark appearance. On the under side it is a network of paler and darker yellow. The spinnerets are brighter yellow, and the epigyne brown with yellow in the hollows and an oblong grey area behind it.

The cephalothorax is moderately convex, twice as long as broad and one-half of its greatest breadth across the eye-area. The sides of the cephalic part are straight, those of the thoracic
rounded and there are no depressions separating the two ; a longitudinal fovea reaches into the rear slope.

The rear row of eyes is slightly recurved and stretches quite across the cephalic part. The median pair are less than onethird of their diameter apart and four times their diameter from the side eyes, which are rather more than half the same diameter across. The front median are one-eighth wider than the rear median, twice their diameter apart, and $2 \frac{1}{2}$ times the same from the rear, thus forming a trapezium twice as wide in front as posteriorly and slightly longer than broad. In a lateral direction they are the same distance from the side eyes as from the rear median. The front side eyes are the same size as the rear side, but half their diameter away, and the front and rear are each on a small separate tubercle. The clypens is $1 \frac{1}{2}$ times the width of one of the front median eyes.

The mandibles are conical, kneed at the base, smooth and shiny. There are two teeth on the onter faht-margin, the anterior twice as long as the lower one; three on the imer margin.

The maxillæ are convex and nearly square. The lip has a short, straight-sided base, the longer and very convex upper part curving to an obtusely angled point.

The sternum is slightly convex, twice as long as broad, shieldshaped, hollowed in front, almost straight at the sides, and narrows rather suddenly to a point, which does not go between the contiguous rear coxæ.

The abdomen is oval, $2 \frac{1}{2}$ times as long as broad; it is sparsely covered with fine downlying hair and has upstanding spinous bristles on the upper side.

The legs are thin and tapering, rather profusely covered with small brown spots, from which spring long upstanding spines and bristles on the patellar, tibial, and metatarsal joints and under side of femoral. Bristles only on the tarsal joint.

The palpi have the femoral joint incurved, the patella one-half as long as the tibia, and long spinous bristles on the latter.

The measurements (in millimetres) are as follows:-

| Cephalothorax... | Long. 3 | $\begin{aligned} & \text { Broad. } \\ & \left\{\begin{array}{l} 1 \text { in } \mathrm{fl} \\ 1 \frac{1}{2} \end{array}\right. \end{aligned}$ | ont. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Abdomen......... | 5 | $2^{2}$ |  |  |  |  |
| Mandibles | $1 \frac{1}{4}$ |  |  |  |  |  |
|  | Coxe. | Tr. \& fem. | Pat. \& tib. | Metat. <br> \& tars. |  |  |
| Legs ......... 1. | 1 | $3 \frac{1}{2}$ | $4 \frac{1}{2}$ | $4 \frac{1}{2}$ | $=$ | 131 $\frac{1}{2}$ |
| 2. | $\frac{3}{4}$ | 3 | 4 | 4 | $=$ | $11 \frac{3}{4}$ |
| 3. | $\frac{1}{2}$ | 2 | $2 \frac{1}{4}$ | $1 \frac{3}{4}$ | $=$ | $6 \frac{1}{2}$ |
| 4. | $\frac{3}{4}$ | 3 | $3 \frac{1}{2}$ | $3 \frac{1}{2}$ | $=$ | $10 \frac{3}{4}$ |
| Palpi ............... | $\frac{1}{4}$ | 1 | $\frac{3}{4}$ | $\frac{3}{4}$ | $=$ | $2 \frac{3}{4}$ |

Of L. Koch's two species, L. phthisica and L. tabida, this species more nealy resembles the former, but is two-thirds smaller and much brighter in colouring. The rear median eyes are larger
than the laterals instead of the same size, and the row recurved from above instead of straight; the clypeus broader. The abdomen also is broader in comparison with its length, and there are only two teeth on the outer falx-sheath (one quite long) instead of four small ones. The epigyne also differs from L. Koch's drawing.

The colouring is very close to Dr. Kulczyski's L. vicina, from New Guinea, but this species is smaller : the epigyne differs; the rear middle eyes are farther apart; the mandibles longer, two and three teeth respectively, instearl of four, on each margin ; spots on first pair of legs instead of none; no spots on the back instead of six pairs. The abdomen is also wider in proportion to length.
L. montagui is also very close in most respects to Von Keyserling's Larinia (Epeira) talipedata, but in the latter the rear median eyes are as large as the front merlian, and twice their diameter apart, instead of close together.

This species differs in many points from M. Simon's L. eburneiventris, from S.W. Australia.

## Group Aranee.

## Genus Araneus Clerck.

## Araneus reversus, sp. n. (Pl. I. fig. 5.)

This spiler belongs to L. Koch's and E. Simon's first series, with shoulder-humps, the abolomen rounded in front and obtusely pointed at the rear.

The cephalothorax, mandibles, and sternum are black-brown with long coarse white hatio and white spinous bristles.

The lip and maxilla are black-brown with wide greyish-yellow margins and red-brown fringes.

The coxie and femoral joints of the legs and palpi are dark dingy yellow-brown, the patella and tibia nearly hack-hrown, thickly covered with white hair and numerons spines brown just at the base, but white from there to the point. The netatarsus and tarsus dark dingy yellow-hown with white hair on the basal half of the former, but brown bristles and yellow spines on the anterior half and on the tarsus.

The upper side of the abdomen is at the hase yellow mottled with brown spots. Rumning from this to about halfway down the back is a black-brown median stripe, bordered with yellow and scolloped at the edges into three divisions, and each side of this is a black transverse streak, separater from it by a short longitudinal yellow streak, reaching to the shoulderhumps. From each of these a dark brown scolloped line runs along the side, meeting at the rear end. The latter enclose another scolloped triangular area of brown and yellow intermixed, the straight upper side touching the end of the anterior median stripe. The front part is thickly set with upstanding white spines on brown bases. On the under side a pale
yellow shield pattern, mottled with brown spots, reaches from the genital fold to the spinnerets, with two dark brown longitudinal spots thereon, the basal area being all brown. The spinnerets are black-brown, the epigyne yellow-brown. There is a pair of small brown conical protuberances, one on each side of the breathing-slits. On the sides are vertical black-brown stripes on a dingy yellow ground.

The cephalothoma is one-fifth longer than broad, straight in front, where it is not quite one-half its greatest breadth, convex, rounded at the sides, thickly covered with forward-pointing long coarse hair and upstanding bristles, but bare on the rear slope.

The median quadrangle of eyes is on a somewhat low protuberance lying on the front slope. The rear row is straight, the median their diameter apart, the same distance from the front row, and six diameters from their respective laterals. The front median pair are $1 \frac{1}{2}$ times the diameter of the rear and that distance apart. The clypeus is the breadth of one of them. The side eyes are equal in size on a common raisel prominence, not much smaller than the rear median, almost touching one another, the front one lying just below and by the distance of its diameter nearer the contre eyes than its upper companion.

The mandibles are broad, conical, kneed at the base, somewhat divergent, and as long as the fiont of the cephalothorax is broad. They are furnished with bristly hairs for one-third of the distance from the base and on the inner edges, the remainder being smooth. The fangs are stout and not much curverl. On the outer margin of the falx-sheath are three stout teeth near the base. I could not see those on the inner margin.

The maxillæ are nearly triangular, straight on the inner side and front edge, with rounded back and corners. They are as high as the greatest breadth, which is at the front margin. The lip is convex, broader than long, rounded in front, and less than half the length of the maxillæ.

The sternmm is convex, shield-shaped, rounded at the sides, pointed at the rear, where it does not divide the rear cosre. There are rounded prominences opposite the 1st, 2nd, and 3rd coxæ. It is thickly covered with long coarse hair and upstanding bristles, particularly thick at the side edges, opposite coxa 1 and 2.

The abdomen is ovate, rounded in front, obtusely pointed at the rear, thick at the sides. There are two shoulder-humps on the upper side. From between these to the base it is thickly covered with short thick upstanding spines, of which there are also some few in other parts. It is moderately thickly covered with downlying rather coarse hair both on the upper and under side. From the rear end of the upper side to the spinnerets the abdomen sinks perpendicularly a distance equal to the length of the cephalothorax.

The epigyne is of the curious upright pillar type, a stont thick
rounded column rising from an oval muscular scape. The anterior portion is club-shaped seen from behind, but a flattened wedge from the side.

The legs are moderately long and stout, the anterior end of the tibial joints being flattened and broadened out. There are bare streaks on the sides of these, but none above. The thick hair is downlying and smoother than in other parts, and there are no spines above either on these or the patellæ, though several at the sides.

The femoral joint of the palpi is curved inwards, broadest and flattened at the anterior end. The tibial joint is twice as long as the patellar, and numerous upstanding spines and bristles cover the whole length.

The measurements (in millimetres) are as follows:-
Long. Bread.

| Cephalothorax... | 5 | $\left\{\begin{array}{l}2 \frac{1}{4} \mathrm{in} \\ 4\end{array}\right.$ | front. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Abdomen......... | 11 | 9 |  |  |  |  |
| Mandibles | $2 \frac{1}{4}$ |  |  |  |  |  |
|  | Coxx. | Tr. \& fem. | Pat. \& tib |  |  |  |
| Legs ........ 1. | $1 \frac{3}{4}$ | - | $6 \frac{1}{2}$ | 6 | $=$ | $20 \frac{1}{4}$ |
| 2. | 13 | $5 \frac{1}{2}$ | 6 | $5 \frac{1}{2}$ | = | $18 \frac{3}{4}$ |
| 3. | $1 \frac{1}{2}$ | $4 \frac{1}{2}$ | $3 \frac{1}{2}$ | $3 \frac{1}{2}$ | = | 13 |
| 4. | $1 \frac{3}{4}$ | $5 \frac{1}{2}$ | 5 | 5 | = | $17 \frac{1}{4}$ |
| Palpi ............... | 1 | 2 | 2 | 2 | $=$ | 7 |

A small non-adult male has the scolloped black stripe at the anterior end of the abdomen and the black scollop bordering the inner pattern at the posterior end, on a yellow-grey ground.

## Group Gasteracanthe.

Genus Gasteracantha Sund.
Gasteracantha minax Thor:
10 females and 1 male, P. D. M. 6 females, T. H.
This spider is found in considerable numbers from the east coast of New South Wales, through Victoria and South Australia to theIndian Ocean in Western Australia, its place being taken on the. north coast by Gasteracantha vittata Thor., which appears by far the most common species there. These specimens are from the most northerly point yet recorded for the species.

Gasteracantha minax Thor., var. lugubris L. Koch.
5 females; all black, no bright markings.
Gasteracantha minax Thoor., var. astrigera L. K.
6 females; black, with orange spot on stermm.

Gasteracantha minax Thor., val. hermitis nov. (Pl. I. fig. 6.)
4 females. Abdomen pearl-grey above, legs, cephalothorax, and sternum bright orange.

I have previously pointed out (Proc. R. S. Vict. vol. xiii. 1900, p. 79) that specimens of L. Koch's species Gasteracantha astrigera and $G$. lugubris were generally found wherever there was a number of G. minax Thor., and that there was little or no structural difference between the three. I therefore designated the former as varieties only of the latter.

On this small island we find associated with G. minax not only these two varieties, but a third, emphasizing the fact that althongh very different in coloration they are really only varieties, possibly interbreeding, but all essentially the same species.

The shape of the mandibles, mouth-parts, sternum, vulva, and ocelli markings on the back are the same in every case. The spines, however, often vary in length and shape in the same group of similarly coloured specimens.

## Family Thomiside.

## Subfamily Misumenine.

## Group Dietee.

Genus Dieta E. Sim.
Dieta isolata, sp. n. (Pl. II. fig. 7.)
The cephalothorax is pale canary-yellow, except over the eyespace, which is quite white, with a few scattered fine white hairs.

The mandibles are darker yellow for the basal half, the anterior half bright pale yellow with pink fangs and yellow-grey fringes. The lip and maxillæ pale yellow. Sternum dark grey at the sides with yellow in the middle and pale yellow-grey hair. The legs and palpi are bright yellow, with yellowish-grey spines and a few whitish hairs. The claw-tufts dark grey on the legs and white on the palpi.

The cephalothorax is straight in front and at the sides as far as the back of the eye-space, whence it is almost round, being very slightly longer than broad ( $\frac{1}{4} \mathrm{~mm}$.). It is slightly convex at the sides, but quite flat in the middle and a little higher before the rear slope, whence it slopes gradually to the front. On the thoracic part are faint broad shallow striations and a similar longitudinal fovea.

The perlicule joining the cephalothorax and the abdomen is inserted into a hollow in the former.

The clypens slopes forward and is as broad as the median quarrangle of eyes is long. Both rows of eyes are recurved; those of the front row are almost equidistant, the merlian 4 times their diameter apart. The laterals, whose diameters are $2 \frac{1}{2}$ times
those of the median, are so placed that the line tonching their lower erlges is the brearth of a median eye from the line across the upper edges of the latter.

The median eyes of the rear row are the same size as the front median, $2 \frac{1}{2}$ times their diameter apart, 6 of same from the front median and 8 from the laterals, whose diameter is $1 \frac{1}{2}$ times that of the former. This row is more recurved than the front, and abont 4 times the diameter of the median eyes wider than the front row.

Each eye is on a separate white tubercle, the side ones being much higher than those of the median. The clypeus is as broad as the area of the median quadrangle is long.

The mandibles are short and broad, kneed at the base, thence divergent, the fangs being particularly short and weak.

The lip is straight at the sides, cmrving to a blunt point anteriorly, longer than broad, and more than half the length of the maxillæ, which are upright, the inner edges parallel and straight; from a rounded fore conner they slope downwards with a straight edge, thence rounded at the back for about halfway, where they curve in for the reception of the base of the palpi.

The sternum is shield-shaped, as broad as it is long, truncate in front, flat in the middle, but sloping off in front and where it narrows at the posterior end.

The abdomen is rounded in front, gradually widening to about one-third of its length from the base whence, to halfway, the sides are straight; from half its length it narrows to the rear end, where it is just the breadth of the space occupied by its spinnerets. The latter are quite terminal, of equal length, and they have a short second joint. The superior are cylindrical, about two-thirds the thickness of the inferior, which are conical, flattened in front. The epigyne is of a horseshoe pattern, inside of which is a long oval longitudinal depression flanked by two shorter oval hollows in the upper half. The base is a transverse semicylinder.

The femoral joint of the legs is moderately stout, but the latter taper considerably and the tarsal joint is very fine. There are claw-tufts of flat bristles and a few scattered hairs on the tarsus and metatarsus. On the under side of the tibia are four pairs, and one odd one, of long spines, and four pairs of similar long spines on the under side of the metatarsus; otherwise the legs are smooth.

The palpi are short, the femoral joint incurved, the patella as long as the tibia, and the distal joint, thickly covered with short bristles, as loug as the two preceding.

The measurements (in millimetres) are as follows :-
Long. Broad.


| Legs |  | Сохæ. | Tr. \& fem. | $\begin{aligned} & \text { Pat. } \\ & \text { \& tib. } \end{aligned}$ | Metat. \& tars. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1. | $\frac{1}{2}$ | $2 \frac{1}{2}$ | $2 \frac{1}{2}$ | 2 | $=$ | $7 \frac{1}{2}$ |
|  | 2. | $\frac{1}{2}$ | 3 | 3 | 2 | = | $8 \frac{1}{2}$ |
|  | 3. | $\frac{1}{4}$ | $1 \frac{3}{4}$ | $1 \frac{1}{2}$ | $1 \frac{1}{4}$ | = | 43 |
|  | 4. | $\frac{1}{4}$ | 2 | $1 \frac{3}{4}$ | 12 | $=$ | $5 \frac{1}{2}$ |
| Palpi |  | 1 | 3 | $\frac{1}{2}$ | $\frac{1}{2}$ | $=$ | 18 |

This genus has been described from S. Africa, Asia, and Japan, but no species belonging thereto has previously been noted from Australia. This single female specimen apparently conforms to it in every point.

# Family Clubionide. <br> Subfamily Liocranine. 

## Group Miturgee.

## Genus Miturga Thor.

Miturga parva, sp. n. (Pl. II. fig. 8.)
One male (T. H.).
Cephalothorax pale yellow-brown in the middle and at the margin, covered with pale yellowish-white hair; between these areas on each side is a longitudinal darker yellow-brown streak, with brown hair, reaching from the eye-space to the rear. At the margin there are also darker spots, and a thick fillet of yellowish-white hair projecting from the edge outwards.

The mandibles are dark yellow-brown for two-thirds of the length from the base, paler anteriorly, with dingy yellowish-white hair. The fangs are bright yellow-brown.

The lip, maxille, and stermum are pale yellow with similar yellowish-white hair rather darker on the fringes.

The abdomen above is yellow-brown, with pale yellow-brown hair. On each side, reaching from the base to halfway, is a brown streak and between these, two narrower, less distinct, streaks, and brown blotches between the end of the side stripes and the spinnerets. At the base are a number of brown bristles. The under side is similarly coloured at the base and sides. Beginning at the genital forea and reaching nearly to the spinnerets is a wedge-shaped area of black hair broadest anteriorly. On this are two longitudnal rows of large white spots, and on each side a clear white streak bounds the black area. The legs and palpi are dark yellow on the hasal part of the femoral joint, getting paler towards the anterior joints, with yellowish-white hair, nearly white scopulæ and claw-tufts, and yellowish-grey spines.

The cephalothorax is ovate, one-fourth longer than broar, consex, thickly covered with coarse downlying hair. Round the outer edge of the thoracic part is a thick tillet of hair extending beyond the margin. There is a long broad longitudinal fovea reaching to the rear slope.

The rear row of eyes is recurverl ; the merlian eyes one-third of their diameter apar't and their cliameter from the side eyes, which are on low tubercles and just slightly smaller.

The front row is straight viewed from in front, slightly recurved from above, all the eyes equal in size to the rear laterals and their diameter distant from the rear median. The median are one-third their diameter apart and half that distance from the laterals. The clypeus is not quite twice their diameter in width.

The mandibles are strong and convex, with long powerful falces and two separated teeth on the inner margin of the falxsheath.

The lip is broader than long, straight in front, widening to the base, and less than half the length of the maxillæ. The latter are convex, straight on the inner side and at the apex, but rounded at the corners and on the outer side.

The sternum is a broad oval, hollowed opposite the coxa, and ending in a small point posteriorly well above the contiguous rear coxie. It is thickly covered with coarse downlying hair in the middle, upstanding round the margin.

The abdomen is oval, twice as long as broad. The spinnerets are terminal, with thick matted hair on the upper side, smoother below. In the superior pair the conical second joint is twothirds as long as the basal.

The legs are thickly covered with long coarse hair, with numerous short and some long powerful spines on the femora, tibie, and metatarsi. There are two spines above on tibia iv. On the under side of tibia i. and ii. are three pairs of spines ; also three spines on the inner side of tibia ii., two on tibia i. The claws are short and weak. There are thick scopulæ on all tarsi and metatarsi.

The palpi have the femoral joint incurved, thinner than the other joints, but broadest anteriorly. The patellar joint is shorter and narrower than the tibial, which widens out in front with an apophysis having a curved cusp on the outer corner, but square on the inner.

The measurements (in millimetres) are as follows:-
Long. Broad.

| Cephalothorax... | 5 |
| :--- | :--- |
| Abdomen........ | 6 |\(\quad\left\{\begin{array}{l}2 \frac{1}{4} in front. <br>

4 <br>
Mandibles ··· . .\end{array}\right.\)

| Legs | 1. | Pat. |  |  | Metat. \& tars. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $1 \frac{1}{2}$ | $5 \frac{1}{2}$ | 6 | $5 \frac{1}{2}$ | $=$ | $18 \frac{1}{2}$ |
|  |  | $1 \frac{1}{2}$ | $5 \frac{1}{2}$ | 6 | $5 \frac{1}{2}$ | $=$ | $18 \frac{1}{2}$ |
|  | 3. | $1 \frac{1}{2}$ | $4 \frac{1}{2}$ | 5 | 5 | $=$ | 16 |
|  | 4. | $1 \frac{1}{2}$ | 6 | 7 | 7 | $=$ | $21 \frac{1}{2}$ |
| Palpi |  | 1 | $2 \frac{1}{2}$ | 2 | $1 \frac{1}{2}$ | $=$ | 7 |

This differs from M. lineata Thor., M. gilva L. K., M. agelina E. S., M. occidentalis E. S., M. severa E. S., M. ferina E. S., hesides other points, in laving a black area with white lorgitudinal lines on the under side of the abdomen, and having darker spots but no continuous line along the margin of the cephalic part of the cephalothorax.

From M. thorelli E. Sim., in having the front median eyes smaller than the rear merlian and one cusp only instead of two on the tibial apophysis of the male palp.

From M. maculata H. R. H., M. whistleri E. Sim., M. impedita E. Sim., and M. catograpta E. Sim., besides numerous points which will be gathered from the descriptions, in having three spines on the inner side of tibia ii. and two spines on the inner side of tibia i.

# Subfamily Sparassine. <br> Group Delenee. 

Genus Olios Walck.
Olios calligaster Thor:
3 females (T. H.) non-adult.
1 female (P. D. M.) non-adult.
These specimens, despite the fact that none of them is fully developed, are all larger than those measured by Thorell and L. Koch from the eastern and southern parts of the Continent. In other particulars they quite agree with the original descriptions.

The under side of all the patellæ and tibire is marked with alternate stripes of brilliant silver-grey and brown instead of partly yellow, possibly because they are younger.

The measurements (in millimetres) are as follows:-

| Cephalothorax... | Long. | $\begin{aligned} & \text { Broad. } \\ & \left\{\begin{array}{l} 6 \text { in } \\ 7 \end{array}\right. \end{aligned}$ | ront. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Abdomen......... | 14 | 9 |  |  |  |  |
| Mandibles ...... | $4 \frac{1}{2}$ |  |  |  |  |  |
|  | Coxæ. | Tr. \& fem. | Pat. \& tib. | Metat. \& tars. |  |  |
| Legs ......... 1. | $3 \frac{1}{2}$ | $9 \frac{1}{2}$ | 10 | $9 \frac{1}{2}$ | = | $32 \frac{1}{2}$ |
| 2. | $3 \frac{1}{2}$ | 10 | $10 \frac{1}{2}$ | 10 | $=$ | 34 |
| 3. | 3 | $7 \frac{1}{2}$ | $8 \frac{1}{2}$ | $7 \frac{1}{2}$ | $=$ | $26 \frac{1}{2}$ |
| 4. | $3 \frac{1}{2}$ | $8 \frac{1}{2}$ | 9 | $8 \frac{1}{2}$ | $=$ | $29 \frac{1}{2}$ |
| Paipi | $1 \frac{1}{2}$ | 4 | 3 | 3 | $=$ | $11 \frac{1}{2}$ |

Olios hermitis, sp. n. (Pl. II. fig. 9.)
1 female (P. D. M.) non-adult.
2 females (T. H.) ( 1 ceph. only).
These specimens, none of which is quite adult, are very close to L. Koch's Olios (Sarotes) procerus from the east coast. They differ, however, in the front median eyes being smaller instead of larger than the rear median. The clypeus is as wide as the ristance between the front and rear median eyes-plus the diameter of a front median. The lip is less than half the length of the maxillæ instead of half as long, and the legs are more equal in length, the fourth pair being equal to the front pair, and the second only slightly longer. It is therefore worthy of being made a new species.

The cephalothorax is yellow-brown, with a rather broken yellow-brown marginal stripe on the thoracic part, a similar horseshoe pattern of large brown spots nearer the centre with a single spot between the forward pointing open ends. The eyespace is black-brown, and there are two fainter brown spots behind the rear row. The hair is fine and silvery white, but brown on the spots. The mandibles are yellow with a brown stripe on the outer edge reaching rather more than halfway from the base, and the fangs are brown. On the inner edge of the falxsheath are three large teeth followed by one small one; on the outer margin one large between two small. The lip, maxillæ, and sternum are darker yellow with brown bristly hair.

The legs are orange, with three brown rings on the femur, 1 on the patella, 2 on the tibia, and 2 on the metatarsus of each leg. The scopula on the metatarsus and tarsus are grey, and the claw-tufts nearly black. There are two very long spines, one in front of the other, on the under side of the tibial joint. The tarsal claws are long, with about 10 pectinations on a straight shaft bent at the anterior end, and the female palp-claw las abont half that number.

The measurements (in millimetres) of the largest (front pair of legs only) and of a smaller whole one, are as follows :-



There are two quite young specimens having the front row of eyes straight and of equal diameter-the median pair being their diameter apart, but only half that distance from the laterals. Sternum yellow.

They do not seem to agree with any described species, but are too young to found one on.

Another still smaller seems to be the same, but the front median eyes are apparently farther apart in comparison with their diameter, and one-half that distance from their laterals.

## Subfamily Micarinee. <br> Group Micariee.

Genis Montebello, gen. nov.
This differs from Precilipta Sim. in having the cephalothorax only slightly less broad posteriorly than in its widest part between the 2nd and 3rd coxe, whence it narrows to the front, which is truncate. The clypens distinctly narrower than the front median eyes. The abdomen tapering posteriorly. The area of the median eyes broader than long; the front median larger than the others; the rear row straight or slightly procurved. The 4th pair of legs only moderately longer than the others.
M. tenuis, sp. n. (Pl. II. fig. 10.)

The cephalothorax is pale yellow-brown with a metallic sheen. The mandibles greyish yellow on the basal half, yellower on the anterior, fangs yellow. Lip, maxillæ, and sternum greyish yellow with grey fringes on the former and pale grey hair on the latter: The legs and palpi are pale yellow with almost white hairs. grey spines, and dark grey claw-tufts. The abdomen is pale yellow on the upper side with short fine dark, and some lighter grey hairs, and a darker merlian longitudinal stripe on the posterior half; on the under side it is pale yellow all over.

The cephalothorax is truncate in fiont, longer than broall, rounded at the rear, only slightly narrowing posteriorly from its widest point between the 2nd and 3rd cosæ. From this point it also narrows anteriorly, where it is $\frac{2}{\kappa}$ of its greatest breadth. It is convex, sloping rather steeply to the edge in the cephalic part, and to a flat marginal area at the sides of the cephalic. There is a short thin longitudinal fovea at the top of the rear slope. There are no radial markings, the surface being quite smooth and only a few hairs at the rear of the eye-space.

The rear row of eyes is slightly procurver, equal in diameter, the median being three diameters apart and two of the same from the laterals, and the same distance from the front median. The
median-eye areais broader than long. The front eyes, $1 \frac{1}{2}$ times the diameter of the rear, are the diameter of the latter apart; they are the same distance from the front laterals, the row being nearly straight. The front and rear laterals are of equal diameter, $1 \frac{1}{2}$ of that distance apart. The rear median eyes are sessile, all the laterals on slight protuberances and the front median still more protulberant. The clypeus is only half as broad as a front median eye.

The mandibles are straight on the outer side, slightly kneed at the base, and as long at the front of the cephalothorax as broad, only diverging from each other anteriorly to the extent of the slope of the falx-sheath. The fangs are moderately curved, slight and fairly long; on the inner margin of the sheath are two equalsized teeth, and on the outer, one equally long between two smaller. The lip is broader than long, romded anteriorly, straight at the sides but narrowing slightly to the base, with the anterior margin protuberant. It is not more than one-third the length of the maxillæ. The latter are straight at the anterior margin, nearly parallel at the imer and outer sides, but just rounded at the front corners and widening near the base at the insertion of the palpi.

The sternum is oval, twice as long as broad, narrowing to a point at each end. It is convex with deep depressions in the margin between each pair of coxæ: the rear pair of the latter are contiguous and longer than the rest.

The abrlomen is not quite twice as long as broad; it is rounded in fiont, but not scutate, widest alout the genital fold, whence it narrows evenly to the spinnerets, which are quite terminal and of equal length, the inferior pair contiguous, conical, with quite short hemispherical second joint, the superior cylindrical with a similar short rounded second joint. There are no plumose hairs.

The legs are short and slender, the tarsal joints flat, the two claws have 7 or 8 pectinations, a few $\operatorname{long}$ spines and bristly upstanding hairs on the tibial and metatarsal joints, and claw-tufts of spatulate bristles.

The palpi are inserted at the lower end of the maxillæ, the femoral joint incurved and broadened at anterior end.

The measurements (in millimetres) are as follows :-

|  | Long. | Broad. |
| :--- | :---: | :---: |
| Cephalothorax... | $2 \frac{1}{2}$ | $\{1$ |
| $1 \frac{1}{2}$ |  |  |
| Abdomen......... | $3 \frac{1}{2}$ | 2 |
| Mandibles $\ldots . .$. | 1 |  |


| Legs ........ |  | Coxe. | Tr. \& fem. | $\begin{aligned} & \text { Pat. } \\ & \text { \& tib. } \end{aligned}$ | Metat. \& tars. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1. | $\frac{1}{2}$ | $1 \frac{1}{2}$ | 2 | $1 \frac{1}{4}$ | $=$ | $5 \frac{7}{1}$ |
|  | 2. | $\frac{1}{2}$ | $1 \frac{1}{2}$ | 2 | $1 \frac{1}{4}$ | $=$ | 5 |
|  | 3. | $\frac{1}{2}$ | $1 \frac{1}{2}$ | $1 \frac{1}{4}$ | $1 \frac{1}{2}$ | $=$ | $4 \frac{1}{1}$ |
|  | 4. | $\frac{3}{4}$ | 2 | 2 | 2 | $=$ | $6 \frac{3}{4}$ |
| Palpi .... |  | $\frac{1}{4}$ | $\frac{3}{4}$ | $\frac{1}{2}$ | $\frac{1}{2}$ | $=$ | 2 |

There is one female specimen only (P. D. M.), and the epigyne is not clear enongh to draw.

# Family Licosid.f. 

## Group Lycosee.

## Genus Lycosa Latr.

Lycosa clara L. Koch.
A number of females, only one apparently adult, although they are mostly larger than L. Koch's specimens.

The epigyne is more like L. Koch's drawing of that of L. crispipes, but it otherwise differs from the latter in too many points to be confused with it, and agrees in all others with L. clara. Moreover, the epigyne of the two forms are not very dissinilar with the exception of the ogee-shaped anterior curve of the latter, which is so unusual as to suggest that there may have been some distortion in the specimen from which L. Koch's drawing was made.

The measurements of the largest (in millimetres) are as follows:-

> Long. Broad.

| Cephalothorax... | 10 |
| :--- | ---: |
| Abdomen........ | 9 |\(\quad\left\{\begin{array}{l}3 in front. <br>

4 below. <br>
7 between 2 and 3 pairs of coxæ.\end{array}\right.\)

| Legs |  | Coxæ. | Tr .8 fem. | $\begin{gathered} \text { Pat. } \\ \text { \& tib. } \end{gathered}$ | Metat. \& tars. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1. | 3 | 9 | $9 \frac{1}{2}$ | 10 | = | $31 \frac{1}{2}$ |
|  | 2. | 3 | 9 | $8 \frac{1}{2}$ | $9 \frac{1}{2}$ | $=$ | $30^{2}$ |
|  | 3. | 3 | $8 \frac{1}{2}$ | $8 \frac{1}{2}$ | 10 | = | 30 |
|  | 4. | 3 | $10^{2}$ | 10 | 12 | = | 35 |
| Palpi |  | $1 \frac{1}{2}$ | 4 | $2-2 \frac{1}{2}$ | $2 \frac{1}{2}$ | $=$ | $12 \frac{1}{2}$ |

Family Oxyopide.
Genus Oxyopes Latr.
Oxyopes? mundulus L. K.
Four females, of which one only is adult. The eye-plan is the same in all, and they have numerous flat hairs on the under side of the abdomen, but the younger are all darker in colouring and might be different.

They are rather close to several of L. Koch's species, which are not easy to distinguish. In pattern and size they seem nearest to O. mundulus, O. amœenus L. K., and O. variabilis L. K., to all of which the epigyne might conform.

The measurements (in millimetres) are as follows :-

## Long. Broad.

Cephalothorax... $3 \quad\left\{\begin{array}{l}1 \frac{1}{2} \text { in front. } \\ 2\end{array}\right.$
Abdomen......... 6
3
Mandibles ...... $1 \frac{1}{4}$

| Legs |  | Сохæ. | Tr. \& fem. | Pat. <br> \& tib. | Metat. \& tars. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1. | $\frac{3}{4}$ | 4 | $3 \frac{1}{2}$ | 4 | $=$ | $12 \frac{1}{4}$ |
|  | 2. | $\frac{3}{4}$ | $3 \frac{1}{2}$ | $3 \frac{1}{2}$ | 4 | $=$ | $11 \frac{3}{4}$ |
|  | 3. | $\frac{3}{4}$ | $2 \frac{1}{2}$ | $2 \frac{1}{2}$ | $2 \frac{1}{2}$ | = | $8 \frac{1}{4}$ |
|  | 4. | $\frac{3}{4}$ | $3 \frac{1}{2}$ | $3 \frac{1}{2}$ | $5 \frac{1}{2}$ | = | $13 \frac{1}{4}$ |
| Palpi |  | $\frac{1}{4}$ | $1 \frac{1}{2}$ | $1 \frac{1}{4}$ | 1 | $=$ | 4 |

Genus Peucetia Thor.
Peucetia margaritata, sp. n. (Pl. II. fig. 11.)
The cephalothorax is pale yellow mottled with white and brown upstandling bristles. The eye-space is black and dark yellowbrown, with white downlying flat lanceolate hairs. Mandibles, lip, maxillæ, and sternum bright yellow, fangs of former darker orange. The legs are bright yellow on all joints, with long grey spines and upstanding brown bristles on brown roots. There are short, fine, white scattered hairs on the femoral joints, short brown hairs on the others.

The cephalothorax is longer than broad, rounded at the sides and rear, narrowed in front. It slopes gradually from the sides of the thoracic part, but steeply from the cephalic, with a nearly perpendicular clypeus three-quarters the length of the eye-space.

The cephalic part is clearly separated by depressions from the thoracic part, and there is a deep longitudinal fovea on the rear slope. On the median line are three pairs of bristles with circular roots.

The rear row of eyes is procurved, so that the uppermost points of the laterals are on a line with the lowest part of the median. They are equidistant, but the median are quite perceptibly larger than the laterals, and their distance apart is rather more than the diameter of the former.

The eyes of the second row (the laterals of the front row) are the largest and most prominent of any, their diameter being equal to that of the rear median and a front row combined. They are this distance from the rear laterals. The front row (or front median) are two-fifths the diameter of their laterals (2nd row), their diameter apart, and the same distance from their laterals. The clypeus is the length of the quadrilateral formed by the rear merlian and 2 nd row of eyes.

The mandibles are as long as the cephalothorax is broad in front, conical and slightly kneed at the base, with scattered upstanding bristles on the front and hair on the inner and outer sides. The fangs are broad at the base, but short and weak. The margin of the falx-sheath is smooth but with a fringe on the outer margin.

The maxillæ are long and narrow, rounded anteriorly, and parallel at the side, bending forward over the lip, which is twice as long as it is wide halfway up, but broadens out at the base ; it is rounded anteriorly and more than half the length of the maxillæ.

The sternum is shield-shaped, straight in front, rounded at the rear, where it is nearly as broad as in front, the rear coxæ being $\frac{3}{4}$ of their wilth apart.

The legs are long and fine, tapering anteriorly. They are only sparsely furnished with short downlying haiss on the femoral joints, and short bristly upstanding ones on the other joints. There are five or six pectinations on the superior tarsal claws. There are three pairs of long spines on the under side of all tibiæ, two pairs underneath the metatarsi and about five shorter at the anterior end of same.

The abdomen is broken in each specimen, but in one of them the epigyne is intact; it is ronghly similar to, but more elaborated than that shown in L. Koch's drawing of the only species previously recorled from Australia.

The measurements (in millimetres) are as follows :-

|  | Long. | Broad. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cephalothorax... | 3 | $\left\{\begin{array}{l} 1 \frac{1}{2} \text { in } \\ 2 \frac{1}{2} \end{array}\right.$ | front |  |  |  |
| Mandibles | $1 \frac{1}{2}$ |  |  |  |  |  |
|  | Coxæ. $\frac{3}{1}$ | Tr. \& fem. 5 | Pat. \& tib. 41 | Metat. <br> \& tars. <br> 5 |  |  |
| Legs ........ 1. | $\frac{3}{7}$ | 4 | $\begin{aligned} & 4 \frac{1}{2} \\ & 4 \end{aligned}$ | , | $=$ | $15 \frac{1}{4}$ |
| 3. | $\frac{1}{2}$ | $3{ }^{\frac{1}{2}}$ | 3 | $3 \frac{1}{2}$ | = | $10 \frac{1}{8}$ |
| 4. | $\frac{3}{4}$ | 4 | 3 | 4 | $=$ | $11 \frac{3}{4}$ |
| Palpi ............ | $\frac{1}{4}$ | $1 \frac{1}{4}$ | 1 | $\frac{3}{4}$ | $=$ | $3 \frac{1}{4}$ |

Two females sent by Mr. Haynes.
These would seem to differ from $P$. albessens L. K. in the lighter and brighter colouring, in having no row of dark spots on the side slopes of the cephalothorax, in the greater length of the legs compared with the cephalothorax ( 4 to $3 \frac{1}{2}$ ), and the clypeus not so long as the eye-space, and the more detined epigyne.

# Family Attide. <br> Group Marpissem. 

## Genus Marpissa C. Koch.

Marpissa ridens, sp. 11. (Pl. II. fig. 12.)
The cephalothorax is black-brown on the cephalic part, dark yellow-brown on the thoracic. On the former and on a marginal stripe are downlying white hairs interspersed with orange. The side slopes and posterior end are bare; on the clypens is a fringe of coarse orange-coloured hair.

The mandibles are black-brown with a few brown bristles on the basal half. The fangs are clark yellow-brown.

The lip and maxillæ yellow-brown, paler at the margins, with dark grey fringes and brown upstanding hairs.

The sternum dark yellow-brown with white hairs.
The abdomen on the upper side has a broad median area from base to spimerets of coarse white hair interspersed with orange and upstanding brown bristles; on each side of this is a longiturinal stripe of black bair reaching the whole length. The sides and under side are yellowish white. The spinnerets and epigyne are dingy yellow-brown, with bright yellow inside the chitinous ring of the latter.

The legs are pale yellow with white hair, brown spines, and dark grey claw-tufts. The palpi are thickly covered with long white upstanding hair.

The cephalothorax is nearly $1 \frac{1}{2}$ times as long as it is broad, straight in front, rounded at the rear, slightly narrowing from about the middle to the front row of eyes. The cephalic part is flat above, sloping slightly to the sides, as does also the thoracic part, which is rather more convex, but has a broad shallow transverse depression at its anterior end.

The eye-space is broader than long, the rear row being narrower by almost one-fouth than the cephalothorax at that point. The small eyes of the second row are rather nearer to those of the rear row than to the front laterals, and lie in a line between theircentres.

The front row is slightly recurved, the median eyes being close together; the laterals, half their diameter, are clearly separated from them and lie rather farther back. The clypens is half the breadth of the front median eyes.

The mandibles are short, flat and rather divergent, with moderately long tapering fangs. There is one tooth, strong and conical, on the imer margin of the falx-sheath, and two smaller near together on the outer.

The maxille are upright, rounded anteriorly and at the outer margin.

The lip, longer than broad, is more than half the length of the maxille. It curves inwards from near the front, hut is nearly straight at the end. The front pair of coxæ almost meet at their bases. and with their trochanters cover the lower part of the lip and maxillæ.

The sternum narrows to a point between the front pair of coxæ, hroadens to its greatest width ahove coxæ iii., and ends in front of the fourth pair, which are close together.

The front two pairs of coxæ are parallel, pointing forwards at an angle of 45 degrees from the median line, the rear two pairs similarly pointing backwards at right angles to the front pairs, the 2nd and 3rd being slightly separated. The rear coxæ are longer than the others, which are all about the same length.

The front pair of legs are stonter than the others, the femur being flat and club-slaped. The patella and tibia are longer than the metatarsus and tarsus in all legs, the latter joint shorter than the metatarsus.

On the under side of tibia i. and ii. are three pairs of short
spines, under metatarsus i. and ii. two similar pairs. On tibia iii. and iv. is a single pair, and a bunch at the end of the metatarsus of same. The femoral joint of the palpi is incurved and broadest at the anterior end, the tibia longer than the patella.

The abdomen is rather longer than the cephalothorax, truncate in front, straight at the sides for $\frac{2}{3}$ of its length, whence it narrows to an obtuse point; the epigyne is a chitinous oval ring thickest at the posterior end, granular inside, with two small club-shaped protuberances therein near the lower end.

The measurements (in millimetres) are as follows :-

| Cephalothorax... | Long. <br> $3 \cdot 1$ | $\begin{aligned} & \text { Broal. } \\ & \left\{\begin{array}{l} 1 \cdot 6 \text { in } \\ 2 \cdot 2 \end{array}\right. \end{aligned}$ | front. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Abdomen . | $3 \cdot 5$ | 1.5 |  |  |  |  |
| Mandibles | $\frac{3}{1}$ |  |  |  |  |  |
|  | Coxa. | Tr. \& fem. | $\begin{aligned} & \text { Pat. } \\ & \& \text { tib. } \end{aligned}$ | Metat. \& tars. |  |  |
| Legs ......... 1. | $\frac{3}{8}$ | $1 \frac{1}{2}$ | 2 | $1 \frac{1}{2}$ | $=$ | $5 \frac{1}{8}$ |
| 2. | $\frac{3}{8}$ | $1 \frac{1}{2}$ | $1 \frac{3}{4}$ | $1 \frac{1}{4}$ | $=$ | $4 \frac{7}{8}$ |
| 3. | 3 | $1 \cdot 6$ | 2 | $1 \frac{1}{2}$ | $=$ | $5 \frac{1}{2}$ |
| 4. | 1 | $2 \cdot 2$ | $2 \cdot 3$ | 2 | = | 7 |
| Palpi | $\frac{1}{8}$ | $\frac{3}{4}$ | $\frac{1}{2}$ | $\frac{1}{2}$ | $=$ | $1 \frac{7}{8}$ |

This may be distinguished from any of the recorded Australian species by the black lines on the back of the abdomen and the pattern of the epigyne.

Another smaller specimen, apparently of the genus Marpissa, has contiguous front coxæ longer than the rest, weaker mandibles, and tarsus i. as long as the metatarsus, but is too broken to describe.

## EXPLANATION OF THE PLATES.

Plate I.
Fig. 1. Tetragnatha angulata, sp.n. (×2). a. Mandible from outer side. b. Mandible from imer side. $c$. Epigyne.
2. Nephila meridionalis Hogg, var. hermitis, nov. (nat. size). a. Underside of abdomen. b. Profile. c. Eyes.
3. Argiope haynesi, $\mathrm{sp} . \mathrm{n}$. (nat. size). a. Underside of abdomen ( $\times 2$ ). b. Epigyne. c. Eyes.
4. Larinia montagui, sp. и. ( $\times 2$ ). a. Eyes. b. Epigyne.
5. Araneus reversus, sp. n. (nat. size). a. Male (non adult), $\times 2$. b. Eyes of female. $c$. Epigyne, $d$. Epigyne from side.
6. Gasteracantha minax Thor., var. hermitis, nov. a. Epigyne.

## Plate II.

Fig. 7. Dieta isolata, sp. n. ( $\times 2$ ). a. Eyes and mandibles. b. Epigyne.
8. Miturga parva, sp. n. (nat. size). a. Eyes. b. Underside of abdomen ( $\times 2$ ). $c$. Male palp.
9. Olios hermitis, sp. n. (vat. size of immature). a. Eyes. b. Lip and maxillæ.
10. Montebello temuis, gen. et sp. n. (×2). a. Eyes. b. Mandibles. c. Lip, maxillæ, and sternum.
11. Peucetia margaritata, sp. n. $(\times 2)$. a. Fyes. b. Epigyne.
12. Marpissa ridens, sp. n. ( $\times$ 2). a. Fyes. 〕. Epigyne. c. Lip, maxille, left mandible, and first pair of coxa.


[^0]:    * The length of the cephalothorax in my original description is misprinted $14 \frac{1}{2}$ for $10 \frac{1}{2}$ millimetres.

